

Positive Attitudes towards Older Adults: Characteristics of Prospective Partners in Care

by

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Abstract

With the increase in the aging population it is becoming all the more important to determine who has positive attitudes towards older adults in order to identify those who are best suited to work in geriatrics. The purpose of the current study was to determine which personal characteristics are indicative of positive attitudes towards older adults by using the Cattell 16 Personality Factor Questionnaire and the Kogan's Attitudes Towards Old People scale. Characteristics that were examined included ethnicity, age, gender, and level of education and personality. Caucasian and Indigenous participants were recruited around Sudbury Ontario, ranging from 18 to 50 years of age. The results suggest that gender and personality factors warmth, reasoning, vigilance, privateness and openness to change, are predictive of positive attitudes towards older adults. These results have implications for identifying individuals who are best suited to work in geriatrics and possibly encouraging those to join the field.

Keywords: *Older Adults, Personality, Attitudes, Indigenous*

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Introduction

There has been an increase in the aging population as of late which can be attributed to the baby boomer generation, many of whom are now 65 years of age and older. With the increase in older adults comes greater demand for services geared towards this population such as social services and geriatric care (Spetz, Trupin, Bates, & Coffman, 2015). A study conducted by Statistics Canada in 2016 found that people 65 and older now account for 16.7% of the Ontario population (Statistics Canada, 2017), 20.9% in North-Eastern Ontario. It is estimated that in the year 2041, older adults will consist of 31.1% of the North-Eastern Ontario population (Ministry of Finance, 2018), a phenomenon which is frequently referred to as “the greying of Canada” (Little, 2013). Considering all of this information, it is vital that we continue to conduct research to determine who has more positive attitudes towards older adults so that we are well equipped to deal with the growing demands in this branch of healthcare. The proposed study will aid in identifying those who are better suited to work with older adults. Indigenous and Caucasian people, males and females, different age groups, and people of various levels of education were compared to determine which personality factors are predictive of positive attitudes towards older adults in the general population.

Older Adults in Canada

In Canada, the government classifies people who are 65 years of age and older as “older adults” as this is the age requirement to be eligible for the Canadian Pension Plan as well as Old Age Security payments. Aside from being the age at which people can receive a pension, there is no particular reason the age 65 is used to describe older adults (Little, 2013). Pension plans were first introduced by Otto van Bismarck in Germany in the late 1800s, the program was started so that people 70 years of age and older could receive financial support from the state. It was

believed that by this age many people could no longer meet the physical demands of their jobs. During this period of time, however, not many people lived past the age of 70 and were able to take advantage of the new program. It was eventually adapted for people 65 and older so that fewer people worked until their death (Arza & Johnson, 2006). Currently, however, people do not necessarily retire because they are no longer able to meet the demands of their jobs, many people can work well through their 60s or even 70s. In other parts of the world, however, the age at which a person is considered an older adult differs. For instance, in some non-developed areas in the world such as Africa, the standard age at which a person is considered to be an older adult is between the ages of 50 and 55. This age is chosen in Africa because health begins to deteriorate sooner as a result of their standards of living and their shorter life expectancies compared to those in Westernized countries (World Health Organization, 2002). Though the age at which a person becomes an older adult is subjective, the current study will use 65 and older as the cutoff in reference to older adults, as this is the common cutoff in Canada (Little, 2013).

When one reflects on aging, it is important to acknowledge that being older does not necessarily infer frailty or poor health. In fact, most older adults are in good health and can easily maintain their independence (Little, 2013). Older adults in general, however, do report more health concerns than those in other age brackets. In 2011, the Canadian Community Health Survey indicated that only 46% of people over the age of 65 reported their health as either very good or excellent, whereas 60% of the general population over the age of 12 report having very good or excellent health (Little, 2013). This would indicate that the older our population gets, the more health concerns there will be and the more strain will be put on our health system (Little, 2013). Considering the increase of the proportion of older adults in Canada, it becomes clear that

measures need to be taken in order to ensure that we are well equipped to deal with the growth of demands in geriatric health care.

It is important to ensure that older adults in our communities are well taken care of, first because it is Canadian law as the Canadian Patients' Bill of Rights stipulates that "good-quality, dependable and accessible national system of health care" is every Canadian's right (Smith, 2002). Second, because older adults contribute to our society in a valuable way. For instance, they are consumers who purchase goods and services, creating more jobs which is beneficial to the community. This is chiefly applicable in the field of healthcare, which is experiencing an increase in job opportunities as the Canadian population ages. Furthermore, older adults comprise a large number of formal volunteers in our communities such that they offer their time to help various organizations in their communities. Many organizations would struggle if it were not for the volunteerism of older adults (Menec, 2012). Older adults who volunteer do almost twice as many hours in a year than younger age groups (Statistics Canada, 2015a). This is particularly relevant in rural communities who rely on volunteers as they may not always have the resources to hire aid (Menec, 2012; Wiersma, 2015). Additionally, older adults are informal volunteers in the area of childcare. As a result of the rise in dual income households, parents do not have as much time to spend with their children or the time to take them to their extra-curricular activities (Menec, 2012). In these cases grandparents can assist when parents are not available. Though older adults do not commonly live with their children and grandchildren, when they are nearby they are valuable to have (Little, 2013). Finally, older adults are frequently carepartners for other older adults who need more assistance (Menec, 2012). Husbands and wives care for each other when the other is ill or no longer able to care for themselves. There are also countless instances in which friends help each other when under the same circumstances.

Older adults are frequently underrated and unacknowledged caregivers (Menec, 2012).

Therefore, aside from it being Canadian law, it is clear that Canadians should be investing in proper care for older adults as they are valuable citizens who deserve good quality of care and suitable treatment, and we will all become old with time and would like to be given proper care. Part of this investment into proper care for older adults includes conducting research to determine who might be best suited to work with older adults.

Attitudes Towards and Stereotypes of Older Adults

A major problem that older adults are currently experiencing is the negative attitudes that others have of them. Attitudes consist of personal beliefs, feelings, and behavioral inclinations towards objects, people, groups, or even symbols. Attitudes can be learned by observing others, through conditioning, and can also be projected by the media (Cherry, 2017). Attitudes can be both positive and negative and can be influenced by stereotypes and prejudices. Stereotypes are rigid and commonly held oversimplified views of people or things. For instance, there are stereotypes of specific racial groups, genders, and age brackets to name a few. Stereotypes are used to differentiate groups by relying on the distinctive group features. Stereotypes allow for information to be automatically present when thinking about specific groups; however, they often distort judgments of others. Though some stereotypes lead to more inaccurate impressions of groups than others, no stereotype is true of an entire group of people (Bordalo, Coffman, Gennaioli, & Shleifer, 2016).

An important differentiation to make, when speaking of stereotypes, is between individual-level and societal-level stereotypes. Societal-level stereotypes have to do with how a society as a whole views a certain group (Surina, 2014). For instance, when considering stereotypes of older adults, in religious texts such as the Bible, older adults are frequently referred to as wise and were said to often hold positions of authority. Back then there were not

many people who had the pleasure of growing old as it was very uncommon, therefore those who did manage to reach old age were held in high regard (Chonody, 2018). On the other hand individual-level stereotypes refer to how each individual views various groups (Surina, 2014). There are many factors which influence individual-level stereotypes such as age, gender, level of education and so on. It is important that research be conducted on the attitudes and stereotypes that people have of older adults as these can influence how they are treated. A commonly referred to theory on the effects of attitudes on behavior is that of Ajzen and Fishbein (1977; see Appendix C). Ajzen and Fishbein created a model of attitudes which in the simplest of terms suggests that our behavior is the result of behavioral intentions that are provoked by attitudes and subjective norms. Subjective norms are the environmental factors that also play into our attitudes and behavioural intentions. Since this model was published, there have been many studies conducted on this particular relationship (Scott & Willits, 1994; Kraus, 1995; Ajzen, 2015). For instance, research has shown that when medical professionals and carepartners, or caregivers have negative attitudes and biases towards their patients, it negatively affects the treatment they provide (Chapman, Kaatz & Carnes, 2013; Wade, 1999). These attitudes and biases have been seen to negatively affect the quality of care and the treatment given to racial minorities, people with disabilities, older adults and others.

Given that age is one of the most obvious physical characteristics it can leave one particularly vulnerable to discrimination. Ageism is a term that was coined by Butler in 1969; he later defined ageism in 1975 stating that it is “a process of systematic stereotyping and discrimination against people because they are old, just as racism and sexism accomplish this for color and gender” (p.48); this continues to be the most commonly referred to definition of ageism. The topic of ageism, however, seems to have been dismissed in research, ultimately

failing to bring people's attention to this issue, thus normalizing ageism (Nelson, 2005). Ageism can be seen in everyday situations, for instance, assuming that a slow driver is an older adult or that an older woman cannot carry her own groceries just like everyone else can. There are many instances, however, in which ageism can be much more detrimental. Ageism in the workplace makes it more challenging for older adults to find employment (Little, 2013) and in some circumstances has led to forced retirement (Nelson, 2004). Ageism is also a serious concern in health care settings. Many older adults have reported that they frequently feel as though they have been dismissed by their doctor because of their age; this can result in poor treatment or lack thereof towards older people (Little, 2013). Furthermore, ageism in assisted living facilities can leave older people feeling as though they have no control over their living situation or their lives in general (Little, 2013). Finally, ageism makes it easier to perceive the welfare of older adults as less significant, leaving them more vulnerable to neglect, exploitation, and abuse (Nelson, 2005).

In today's society it seems as though the media is one of our largest influencers (McCombs, 2014). Therefore, though negative stereotypes of older adults as well as ageism can be attributed to a number of causes, it should come as no surprise that the media influences and drives these negative attitudes (Little, 2013). When considering ageism in the media it is important to think of the quantity and quality of older adult appearances. The facts are that older people are underrepresented in the media, and when we do see them they are typically portrayed in a negative light (Nelson, 2005). For instance, in the past, older adults were typically portrayed as comical characters in television shows and movies that embodied multiple stereotypes, such as cognitive, physical, and sexual impotence (Nelson, 2004). Though society is slowly moving away from these "comical" portrayals of older adults the media continues to reinforce negative stereotypes of older people by frequently associating them with frailty, poor health, loneliness,

and so on (Loos & Ivan, 2018). These negative portrayals of the older generation have serious consequences, especially for the youth in our society who are particularly vulnerable to believing what they see on television (Nelson, 2004). This becomes even more consequential when considering the constant increase in the aging population and that today's youth will be the ones responsible for caring for our future older adults. For this reason, it is important to ensure that we can determine which people do not harbor these negative attitudes so that we know our older adults are adequately cared for. Furthermore, it is important that research on ageism and negative stereotypes of older adults be taken seriously so that society can address these issues, and begin to adapt more positive attitudes towards older adults, though that is beyond the scope of the current study.

The Influence of Society and Culture on Attitudes

The role that older adults play in our society also influences stereotypes and ageism. Though older adults do significantly contribute to our society, the roles they play are not as recognized as they once were, rather they are more passive, making their contributions underappreciated. During the late 1800s and the early 1900s, multigenerational families were the norm, in which grandparents lived with their children and grandchildren. In this type of household, older adults were seen as wise and were very respected in their families and communities. They contributed by assisting in raising their grandchildren and taking care of the home. This was referred to as the agrarian society, in which older adults were held in the highest regard, and therefore held much of the power and influence within their societies. Multigenerational families, however, were eventually replaced by nuclear families (Little, 2013).

Nuclear families are described as two biological parents and children residing together in one household (Bengtson, 2001), without the grandparents. Nuclear families were the result of the shift from agrarian to industrial societies. People were obligated to move from their home

towns to larger cities for employment, leaving the older adults behind. The industrial revolution significantly contributed to the weakened social standings of older adults, as their children began to see them as expensive burdens who could not contribute monetarily (Little, 2013).

Consequently, by reducing multigenerational families, grandchildren did not get to spend as much time with their grandparents, which has been shown to negatively influence attitudes towards older adult as well as ageism (Harwood, Hewstone, Paolini, & Voci, 2005; Hewstone, Harwood, Voci & Kenworthy, 2006). More recently we are beginning to see fewer nuclear families and more single parent families, blended families, same sex parent families, and other various family structures, most of which continue to exclude grandparents (Pasley & Petren, 2016). Now that people are spending less time with older adults because of their weakened role within the family structure, it allows for more stereotypes to be formed. When people are not given the opportunity to form their own impression of others they often adopt those of their society and culture in general which leads to more opportunity to assume ageist views and stereotypes of older adults (Usta, Demir, Yönder & Yildiz, 2012).

Though the nuclear family has been the norm for several decades up until recently, not all cultures and ethnicities in North America made the shift, in fact for some multigenerational families remain common. A report published by Statistics Canada found that a large portion of the remaining multigenerational families in Canada consist of newcomers, previously referred to as immigrants, of which the majority are of Asian descent (2015b). Asian culture is also known for holding older adults in high regard (North & Fiske, 2015), though the current study only examined those who reported their ethnicity as either Caucasian or Indigenous. In the current paper ethnicity is a term used to describe nationality and origin. It is important to note that the terms 'Caucasian' and 'Indigenous' are very loose, with an array of different categories of

individuals and cultural identities that fall within each of them. Due to the limitations of recruitment however, it was not feasible to take a more micro perspective. In the current study, those who identify as Indigenous are the original inhabitants of Canada; this term refers to those who identify as First Nations peoples, Métis and Inuit (Dussault & Erasmus, 1996). Caucasian people in the current study are those who primarily identify as being of European decent.

People of the same ethnicity often also share language, religion, ancestry, and other cultural practices and beliefs (Watt & Norton, 2004). Cultural beliefs are what shape social norms and values pertinent to various social groups including older adults, thus leading to perceptions and stereotypes which could be negative or positive. These beliefs, however, are not static and can change as society and culture shift (Chonody, 2018), as was observed during the industrial revolution. Another culture in North America in which multigenerational families are still found is the Indigenous culture, specifically on Indigenous reserves (Lewis, 2011; Pattel, 2007).

Indigenous Culture

Indigenous culture seems to be more resistant to the individualistic ideals brought on by the industrial revolution and the nuclear family. Indigenous peoples are historically known for practicing collectivism in many aspects of their cultural activities, from decision making to raising and educating their youth (Fielding, Christison, & Harding, 2009, Simpson, 2011). They believe that by acting and thinking collectively, they will be better suited to serve the common good. Though this sense of collectivism may not be as strong as it was before colonization, it still plays a large role in their societies (Fielding et al., 2009; Simpson, 2011). Before colonization, Indigenous peoples in Canada practiced egalitarianism as a way of living. At the time people could not survive on their own because it was dangerous to hunt without being in a group and not

all members of the community, including children and older adults, were able to hunt. For that reason tasks were divided amongst community members based on individual abilities, which benefitted the entire community (Fielding et al., 2009; Simpson, 2011). Throughout colonization, however, Indigenous peoples were subjected to mass cultural genocide in which European immigrants attempted to destroy Indigenous culture by stripping them of their land, language, belief systems and other basic rights (Dussault & Erasmus, 1996; Reyhner & Singh, 2010). Indigenous children were taken from their homes and were forced to attend schools with curriculums which destroyed cultural and family values, which strongly affected Indigenous lifestyle (Dussault & Erasmus, 1996; Reyhner & Singh, 2010).

In today's society, Indigenous peoples suffer from higher rates of health issues, mental health, and social issues than the general population. For instance, Indigenous men are 5 to 6 times more likely to be incarcerated than Caucasian men, demonstrating that Indigenous peoples continue suffer from colonization (Dussault & Erasmus, 1996; Kirmayer, Simpson, & Cargo, 2003). Despite forced assimilation, Indigenous culture has persisted. Many cultural immersion programs have been developed for Indigenous peoples to help them learn and strengthen their Aboriginal languages and develop their cultural identity, thus helping to strengthen cultural values pertaining to the knowledge and wisdom of Elders and older adults in Indigenous communities (Kirmayer et al., 2003). Unfortunately, the circumstances under which many Indigenous communities live in have required many people to move, including Elders and other Indigenous older adults, which is yet another barrier to maintaining Indigenous culture (Kirmayer et al., 2003; Marrone, 2007).

Elders, not to be confused with older adults in general, are certain members of Indigenous communities who are highly valued because of their years of experience and the wealth of

knowledge they provide to ensure the survival of the community (Kulchyski, McCaskill & Newhouse, 1999; Pattel, 2007). Though not all older adults are given this prestigious title, older adults in general are all highly respected in these communities (Pattel, 2007). More recently, research has found that most Elders and older adults in rural communities frequently reside with their children and grandchildren all in the same home (Lewis, 2011; Pattel, 2007). In these settings, the Elders and older adults often help raise their grandchildren so that their children can work to support the home financially (Lewis, 2011; Pattel, 2007). Elders also assist their communities by contributing to their wellbeing and by offering their wisdom to people in their families and others in their community (Berry, 1994; Kulchyski, 1999; Lewis, 2011). Furthermore, Elders teach children in their communities knowledge and skills which they deem integral to survival, such as how to live off the land as well as how to care for people in their family and community. When Elders and older adults alike are given these types of roles within their communities and families it offers them a sense of support, engagement, and purpose (Lewis, 2011). On the other hand, research also suggests that the more time youth spend with older adults in general, the better their attitudes towards them (Laditka, Fischer, Laditka & Segal, 2004; Gellis, Sherman & Lawrence, 2010; Rupp, Vodanovich & Crede, 2005; Runkawatt, Gustafsson & Engström, 2013; Usta et al., 2012). This demonstrates the bidirectional advantages of having older adults involved with their families and communities.

Personality

Personality is a term used to describe an individual's distinctive collection of consistent behavioral qualities (Weiten & McCann, 2011). Various psychologists have attempted to identify a set of personality traits which can be used to describe any individual's personality, such as Cattell who identified 16 (Weiten & McCann, 2011; Cattell, Cattell & Cattell, 1993). It is

believed that personality can help explain why people behave in certain fashions and why they make certain decisions (Weiten & McCann, 2011). Many scientists have come up with theories to help explain how personality is derived. Of particular interest to the current study is the social cognitive theory set forth by Bandura (1977). Bandura suggests that behavioral patterns (i.e., personality) are largely the result of learning and, thus, the environment. However, he contends that people can also alter their environment, therefore suggesting that there is a bidirectional relationship between personality and the environment (Bandura, 1977). This demonstrates that there is a certain inherent component to personality and that it is not simply acquired. Loehlin further established the genetic component to personality when conducting twin studies which demonstrated that identical twins reared apart had more similar personality traits than fraternal twins reared apart (Loehlin, 1992).

One of the many environmental factors which contribute to personality formation is culture. Robert White conducted research which found that our social environment, and ultimately culture, plays a large role in shaping our personality (1952). For instance, research found that there are significant differences in some personality traits between those from individualist cultures and those from collectivist cultures (Triandis & Suh, 2002). This reaffirms that culture plays an important role in the development of personality.

Personality has also been found to influence attitudes and beliefs held by people. There is a vast array of research which has evaluated the relationship between personality and various attitudes such as attitudes towards diversity, attitudes towards traffic safety, attitudes towards immigrants and much more (Strauss, Connerley & Ammermann, 2003; Mallia, L., Lazuras, Violani & Lucidi, 2015; Gallego & Pardos-Prado, 2014). Said research includes attitudes towards older adults. The first study to evaluate the relationship between attitudes towards older

adults and personality was conducted by Kogan in 1961. The results of his study indicated that the personality trait nurturance was positively correlated with positive attitudes towards older adults whereas authoritarianism and anomie were negatively correlated with positive attitudes towards older adults. Similarly, Thorson and Perkins (1981) identified high nurturance, high endurance, and low aggression as personality traits which were positively correlated with positive attitudes towards older adults. Lastly Cornwell (2012) found the personality traits empathy, reasoning ability, and emotional reserve to be related to positive attitudes towards older adults, thus demonstrating that there is a clear relationship between attitudes towards older adults and personality.

Conceptual Framework

The current study will evaluate personal characteristics of individuals to determine what characteristics are related to positive attitudes towards older adults. Characteristics that will be evaluated include age, gender, level of education and ethnicity. These characteristics were chosen as research demonstrates that they have an influence on attitudes, as will be discussed in the upcoming pages (Ladika et al., 2004; Mansfield-Green, Morrisseau, Valliant & Caswell, 2015; Thorson, Whatley & Hancock, 1974; Valliant, Aelick, Sinclair & Caswell, 2018; Young-Shin Lee, 2009). It is not feasible or ethical, however, to hire people based on demographic information. It is our belief that personality is a more appropriate avenue for determining suitability in working in the field of geriatrics. Adjusting for age, gender, level of education and ethnicity will provide an understanding of the personality factors in the general population which are predictive of positive attitudes towards older adults.

Recent research by Mansfield-Green et al. (2015) assessed the attitudes and personality correlates of undergraduate students towards older adults. The results of this study indicated that

participants in general had overall positive attitudes towards older adults (Mansfield-Green et al., 2015). In particular, students with high rule-consciousness, low tension, and high emotional stability scores had more positive attitudes towards older adults than the general sample. Furthermore, females were found to have significantly more positive attitudes towards older adults than males, a result which has been observed in the literature (Allan & Johnson, 2009; Barrett & Rohr, 2008; McConatha, Hayta, Rieser-Danner, McConatha & Polat, 2004; Rupp et al., 2005; Soderhamn, Lindencrona & Gustavsson, 2001; Usta et al., 2012). A comparison of the 16 personality factors (16PF) of males and females demonstrated that females had significantly elevated scores on the warmth scale which correlated with more positive attitudes towards older adults. The results of this study suggest that women are more suited to work with geriatric populations as they exhibit personality traits which are conducive with positive attitude towards older adults (Mansfield-Green et al., 2015).

A study published by Morisseau, Caswell, Sinclair, and Valliant (2017) evaluated attitudes towards older adults in Indigenous communities and demonstrated this population had overall positive attitudes towards older adults irrespective of whether they lived on or off an Indigenous reserve. The 16PF trait reason was found to be positively correlated with attitudes towards older adults within this sample, whereas the personality trait rule-consciousness was negatively correlated with positive attitudes towards older adults (Morisseau et al., 2017). This study also found that there were no differences in attitudes between males and females, suggesting that Indigenous cultural values may bridge the gap between the genders, thus reducing disparities in their attitudes as most other studies on gender differences have found differences in attitudes (Allan & Johnson, 2009; Barrett & Rohr, 2008; Mansfield-Green et al., 2015; McConatha et al., 2004; Rupp et al., 2005; Soderhamn et al., 2001; Usta et al., 2012). It is

worth noting that the personality traits which were found to be associated with positive attitudes towards older adults differed in the Indigenous (Morisseau et al., 2017) and Caucasian (Mansfield-Green et al., 2015) studies. This suggests that cultural differences may be a factor which influences the development of personality characteristics correlated with positive attitudes towards older adults.

A study conducted by Valliant et al. (2018) sought to determine if there were differences in attitudes towards older adults in Indigenous and Caucasian samples. The results of the study indicated that Indigenous participants exhibited more positive attitudes towards older adults than Caucasian participants, although attitudes in both groups were found to be positive in general. This difference could be explained by the fact that people in Indigenous communities tend to show more empathy towards their extended families (Pattel, 2007). Furthermore, they tend to value older adults in their communities regardless of kin relationship, as their cultural teachings indicate that youth and young adults have much to learn from older people as wisdom is associated with age (Pattel, 2007). Moreover, research indicates that younger generations in Indigenous communities have higher opinions of older adults than those in Caucasian communities (Zandi, Mirle, & Jarvis, 1990). These factors may contribute to their generally positive attitudes towards this population. The current study will attempt to replicate these results and will seek to better understand the differences found in the Valliant et al. (2018) study between Caucasian and Indigenous populations.

Age is another variable which may influence attitudes towards older adults. A literature review regarding age and attitudes towards older people has yielded mixed results. Some studies have indicated that there is no effect of age on attitudes towards older adults (Chasteen, Schwarz & Park, 2002; Young-Shin Lee, 2009). Other research has found that people who are middle

aged and beyond have more positive attitudes towards older adults than young people (Gellis et al., 2010; Laditka et al., 2004; Rupp et al., 2005; Runkawatt et al., 2013; Usta et al., 2012).

Furthermore, it is possible that the personality traits that correlate with positive attitudes towards older adults differ from one age group to the next because dominant personality traits among various age groups have been found to differ. One study in particular by Soubelet and Salthouse (2011) found that among other personality traits, older people have higher levels of conscientiousness, a personality trait that Mansfield-Green et al. (2015) found to be correlated with positive attitudes towards older adults. Therefore, an examination of age is imperative in the evaluation of positive attitudes towards older adults.

Research suggesting that level of education may be another important variable to consider when examining attitudes towards older adults. A study conducted by Thorson et al. (1974) found that higher education led to better attitudes towards older adults. Since the article by Thorson et al. (1974), no articles have been published on the relationship between level of education and attitudes towards older adults to our knowledge; however, more recent research has indicated that level of education does influence attitudes of other various subject matters. Gómez-Nacht (2014), for instance, found that higher levels of education were positively correlated with attitudes towards mental health. Moreover, it is important to consider that dominant personalities may vary based on level of education. Studies have found that personality influences the level of education sought by individuals as well as their academic achievement (Lufi, Parish-Plass, & Cohen, 2003). Contrastingly, research also suggests that the education people receive influences their personality traits (Dahmann & Anger, 2014), which depicts the model of personality referred to a reciprocal determinism (Weiten & McCann, 2011). It is important to consider that personality traits which correlate with positive attitudes towards older

adults may differ based on the individual's level of education and, therefore, education level is a variable which should be controlled for.

Overall, it can be seen that multiple variables such as ethnicity, age, gender, and level of education influence attitudes towards older adults. These variables, however, may also effect the personality traits that are correlated with positive attitudes towards older adults. Thus far, research has not sought to identify one set of personality traits among the general population which are associated with positive attitudes towards older adults. The current study controlled for ethnicity, age, gender, and level of education in order to identify one set of personality traits which are conducive of positive attitudes towards older adults so that this personality construct is more easily applicable (see Appendix D). Moreover, the current study will seek to contribute to the growing body of literature on the relationship between the variables being evaluated and attitudes towards older adults.

Based on the literature review outlined above, the proposed study hypothesizes the following:

Hypothesis 1) It is expected that personality traits will be identified as being related to positive attitudes towards older adults regardless of age, ethnicity, gender, and level of education.

Hypothesis 2) Indigenous participants will have overall better attitudes towards older adults than Caucasian participants.

Hypothesis 3) Females participants will have overall better attitudes towards older adults than male participants.

Hypothesis 4) Older participants will have overall better attitudes towards older adults than younger participants.

Hypothesis 5) People with higher levels of education will have overall better attitudes towards older adults than people with lower levels of education.

The results of this study were intended to provide evidence of characteristics and personality traits which are correlated with positive attitudes towards older people. This will allow for policies pertaining to the hiring of people in geriatrics care. Additionally, this personality construct could be applied in vocational tests used in secondary schools to help students determine what career path they would be best suited for, which may possibly help to encourage more students to consider careers in geriatrics. As a result, we can begin to meet more of the demand in that specific sector of health care. Finally, contributing to this field of research may provide additional support for funding in Indigenous communities to help older adults age in place, as it would demonstrate that there are people in their communities who are suitable care givers.

Method

Ethical approval was granted for the current study by the Laurentian University Research Ethics Board (see Appendix A). Participants were recruited using word of mouth and convenience sampling in which posters were displayed at the Native Friendship center in Sudbury and on the social media platform Facebook. Individuals who expressed an interest in participating were given an envelope containing the questionnaires to take home and complete on their own time. The questionnaire package included an instruction page, two consent forms, a demographics questionnaire, a measure to assess their attitudes towards older adults and a personality questionnaire. Once they completed the questionnaire they would seal it in the provided envelope and then contact the researcher and return the questionnaire package. Most

questionnaires were returned to the researcher at the university, however, the researcher would sometimes travel to participants to retrieve them.

Participants

A total of 92 people between the ages of 18 and 50 completed the survey; however, five did not indicate basic demographic information such as age and ethnicity and were therefore removed from the dataset for subsequent analyses ($N = 87$). Participants were divided into two groups based on ethnicity: Caucasian or Indigenous. Of the 87 participants, 61 identified as Caucasian and 26 identified as Indigenous. Of the Caucasian participants, 59.02% were female ($n = 36$) and 40.98% ($n = 25$) were male. The mean age of this subgroup was 31.23 ($SD = 10.51$). Evaluation of level of education indicated that of the Caucasian population 20 had completed secondary school, 20 had gone to college, 17 indicated they had a bachelor's degree, 2 had a graduate degree and 1 had a doctoral or medical degree (1 Caucasian participant did not report their level of education; see Figure 1). Of the 26 Indigenous participants 43.31% were female ($n = 11$) and 57.69% were male ($n = 15$). The mean age of Indigenous participants was 38.89 ($SD = 10.54$). Examination of level of education showed that 13 reported having only their Grade 12, 9 had gone to college, 3 had their bachelor's degree and none had either a graduate degree or doctoral or medical degree (1 Indigenous participant did not report their level of education; see Figure 1). As the subsamples in each level of education in both Caucasian and Indigenous populations are vastly different, with some being nil, this variable was excluded from further analyses.

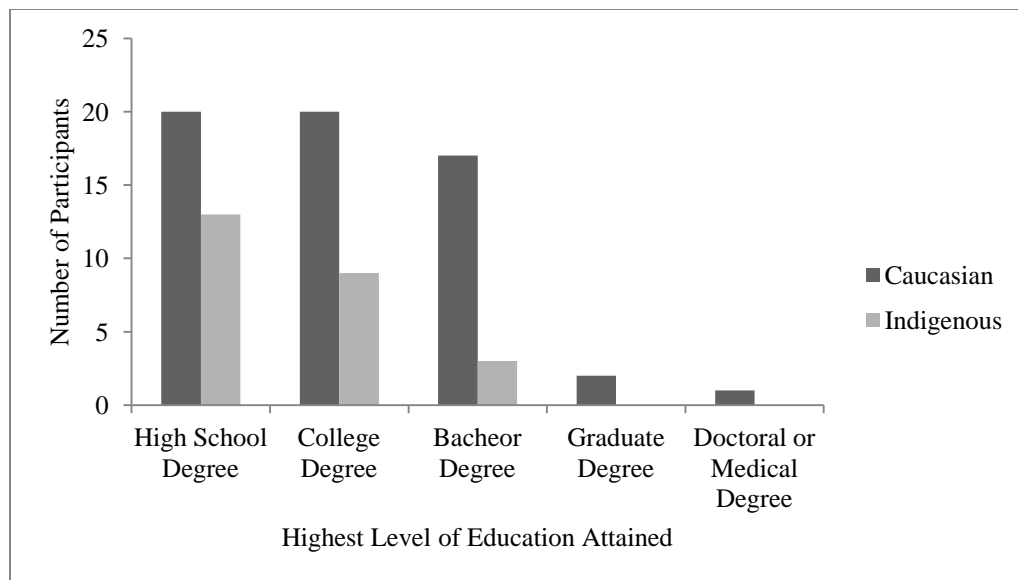


Figure 1. Highest level of education attained by participants organized by ethnicity.

Measures

Demographics (see Appendix F). The demographic questionnaire included specific question pertaining to ethnicity, age, level of education and gender.

Attitudes towards older adults (see Appendix B). The Kogan's Attitudes Towards Old People (KAOP) is measured on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree) with 34 items which are used to determine how negative or positive a person's attitudes towards older adults are (Kogan, 1961). Half of the items on the scale are of positive valance, whereas the other 17 items are of negative valance. All items of negative valance are reverse scored; therefore more positive attitudes towards older adults are indicated by higher overall scores (Kogan, 1961). With a maximum score of 204 on the KAOP, scores ranging from 120 and up are considered to be indicative of positive attitudes towards older adults (Doherty, Mitchell & O'Neill, 2011). The KAOP is the most commonly used test to assess attitudes towards old people and has consistently been found to be a reliable and valid measure (Doherty et al., 2011).

Personality. The Cattell 16 Personality Factor Questionnaire (16PF) is a 185 item questionnaire that is regularly used to indicate the test taker's dominant personality characteristics. All 16 personality factors are assessed on a bipolar scale, indicating those with a high score strongly demonstrate this dimension and those with a low score demonstrate the opposite of this dimension. Scores for each personality factor range from 1 to 10 (Cattell et al., 1993). The factors on the 16 PF include: warmth (factor A), reasoning (factor B), emotional stability (factor C), dominance (factor E), liveliness (factor F), rule-consciousness (factor G), social boldness (factor H), sensitivity (factor I), vigilance (factor L), abstractedness (factor M), privateness (factor N), apprehension (factor O), openness to change (factor Q1), self-reliance (factor Q2), perfectionism (factor Q3), and tension (factor Q4; Cattell et al., 1993). The Institute for Personality and Ability Testing (2009) has indicated that these dimensions have been shown to be reliable indicators of personality. Factor analyses which were used to originally develop the 16PF have consistently been found to be valid and reliable. This test indicates that respondents should have a fifth grade reading level, indicating that participants in the current study would not experience difficulty completing it (IPAT, 2009). Since the 16 PF has already been established as a useful screening tool for employers to use when hiring new staff, it is an adequate tool to be used in the current study as the implications suggest that the results could be utilized during the screening process for employees (Performance Assessment Network, 2016).

Analysis

Statistical analyses were performed using SPSS (Statistics Package for Social Sciences) version 20 and SAS (Statistical Analysis Software) version 9.4. All continuous predictors and outcome variables were assessed for normality using the Shapiro-Wilk test and by visually assessing histograms and Q-Q plots. In order to reduce variance between groups, KAOP scores

were log transformed. Both univariate (crude) and multivariate (adjusted) General Linear Models (GLM) were used to determine which variables significantly predict positive attitudes towards older adults. To conduct the analysis age was considered a continuous variable (from 18 to 50) and level of education included no high school diploma, high school diploma, some post-secondary, university/college degree, graduate degree, and doctoral degree. Because of the small sample size, education was excluded from the analyses. Gender and ethnicity were coded as dichotomous variables.

Results

Once the data were log transformed, GLMs, both unadjusted and adjusted for age, gender, and ethnicity were used to determine if there were any significant predictors of positive attitudes towards older adults; these results are presented in Table 1. According to multivariate analysis, no statistically significant difference was found between the Caucasian ($M = 139.90$, $SD = 15.26$) and the Indigenous ($M = 139.27$, $SD = 11.15$) samples ($p > 0.05$), as demonstrated in Figure 2. These results infer that Caucasian and Indigenous people within the current sample have similarly positive attitudes towards older adults regardless of age or gender. Moreover, age was found not to be a significant predictor of attitudes towards older adults in the current sample, regardless of ethnicity or gender ($p > 0.05$).

Table 1.

Results of the General Linear Model both Adjusted and Unadjusted.

Variable	Unadjusted			Adjusted ^a		
	β (SE)	η^2	p	β (SE)	η^2	p
Age	0.0003 (0.001)	0.001	0.74	0.0003 (0.04)	0.001	0.77
Sex	-0.05 (0.02)	0.07	0.02	-0.05 (0.02)	0.07	0.02

Ethnicity	-0.002 (0.02)	0.0001	0.93	0.004 (0.02)	0.0003	0.87
PF A (Warmth)	0.02 (0.01)	0.16	0.0001	0.02 (0.01)	0.11	0.001
PF B (Reasoning)	0.02 (0.01)	0.07	0.01	0.02 (0.01)	0.11	0.001
PF C (Emotional Stability)	-0.01 (0.01)	0.01	0.30	-0.004 (0.01)	0.003	0.59
PF E (Dominance)	-0.01 (0.01)	0.01	0.48	-0.002 (0.01)	0.002	0.72
PF F (Liveliness)	0.01 (0.01)	0.01	0.41	0.01 (0.01)	0.01	0.38
PF G (Rule-Consciousness)	0.01 (0.01)	0.02	0.16	0.01 (0.01)	0.03	0.10
PF H (Social Boldness)	0.002 (0.01)	0.003	0.64	0.004 (0.01)	0.01	0.45
PF I (Sensitivity)	0.01 (0.01)	0.01	0.37	0.01 (0.01)	0.01	0.29
PF L (Vigilance)	-0.02 (0.01)	0.06	0.02	-0.02 (0.01)	0.07	0.02
PF M (Abstractedness)	0.01 (0.01)	0.01	0.34	0.01 (0.01)	0.01	0.31
PF N (Privateness)	-0.02 (0.01)	0.07	0.01	-0.01 (0.01)	0.06	0.02
PF O (Apprehension)	-0.01 (0.01)	0.01	0.46	-0.01 (0.01)	0.02	0.25
PF Q1 (Openness to Change)	0.02 (0.01)	0.06	0.02	0.01 (0.01)	0.05	0.03
PF Q2 (Self-Reliance)	0.003 (0.01)	0.002	0.67	0.003 (0.01)	0.003	0.60
PF Q3 (Perfectionism)	-0.01 (0.01)	0.03	0.13	-0.01 (0.01)	0.02	0.15
PF Q4 (Tension)	-0.01 (0.01)	0.03	0.11	-0.01 (0.01)	0.02	0.18

Note. ^a = Adjusted for age, sex, and ethnicity

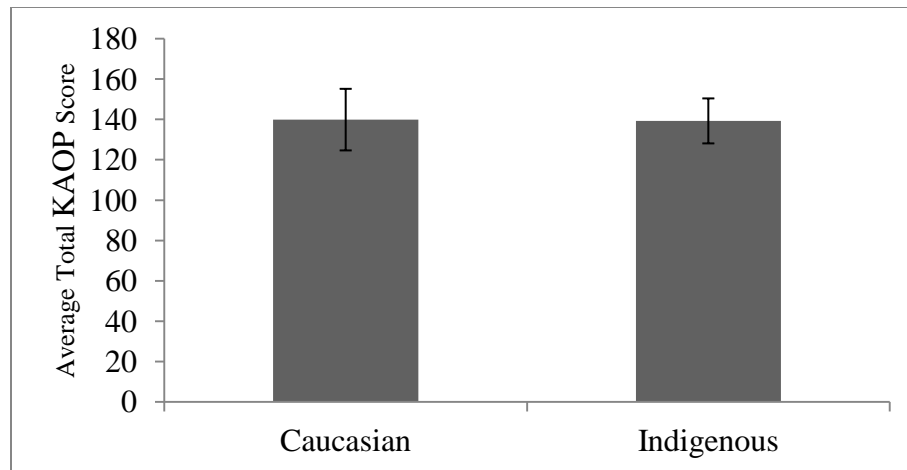


Figure 2. Mean values of total KAOP scores for Caucasian and Indigenous samples.

Error bars indicate standard error of the mean (SEM).

Results of the multivariate adjusted GLM showed that gender was a significant predictor of attitudes towards older adults. These results suggest that males ($M = 136.26$, $SD = 12.03$) have significantly worse attitudes towards older adults compared to females ($M = 143.9$, $SD = 16.19$; $\beta = -0.05$, $p = 0.02$) with an effect size of $\eta^2 = 7\%$ (see figure 3).

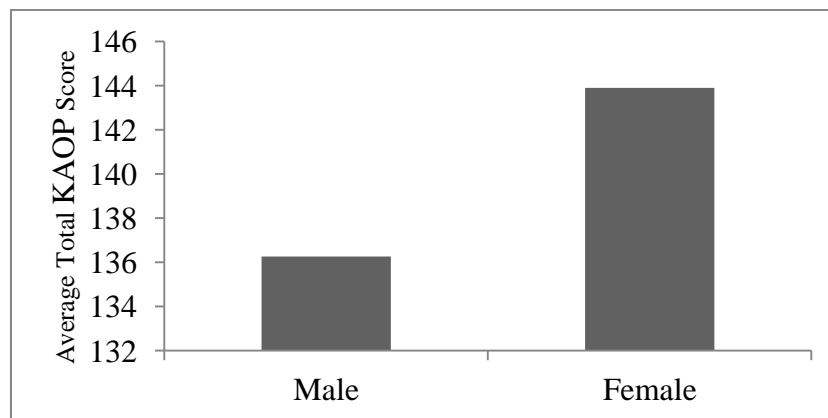


Figure 3. Mean values of total KAOP scores for males and females.

Five of the 16 of the personality factors were found to significantly predict attitudes towards older adults, for which the descriptive statistics can be found in Table 2. The first significant factor was warmth ($\beta = 0.02$, $p < 0.01$) with an effect size of $\eta^2 = 11\%$. This suggests

that those who are warm-hearted and caring have more positive attitudes towards older adults (Cattell & Mead, 2008). Reasoning was also found to be a significant predictor ($\beta = 0.02$, $p < 0.01$) with an effect size of $\eta^2 = 11\%$. *Ergo*, those who are bright, abstract thinkers seem to have more positive attitudes towards older adults (Cattell & Mead, 2008). Vigilance was found to be another personality factor to significantly predict attitudes towards older adults ($\beta = -0.02$, $p = 0.02$) with an effect size of $\eta^2 = 7\%$. This result implies that those who are trusting and accepting of others have more positive attitudes towards the target population (Cattell & Mead, 2008). Privateness was another one of the five significant personality factor predictors ($\beta = -0.01$, $p = 0.02$) with an effect size of $\eta^2 = 6\%$. Therefore, those who tend to be forthright and genuine seem to have better attitudes towards the older population (Cattell & Mead, 2008). The last personality factor found to be associated with positive attitudes towards older adults was openness to change ($\beta = 0.01$, $p = 0.03$) with an effect size of $\eta^2 = 5\%$. This result suggests that people who are open to new things and are not overly traditional seem to have better attitudes towards older adults (Cattell & Mead, 2008).

Table 2.

Median Scores and Interquartile Range for Each Personality Factor by Ethnicity.

Variable	Caucasian (n = 61)	Indigenous (n = 26)
PF A (Warmth)	5 (2) ^a	5 (1)
PF B (Reasoning)	5 (2)	4 (1) ^a
PF C (Emotional Stability)	5 (2)	5 (2)
PF E (Dominance)	5 (2)	5 (1)
PF F (Liveliness)	6 (3)	6.5 (2)
PF G (Rule-Consciousness)	5 (2)	5 (2)

PF H (Social Boldness)	5 (3)	5.5 (3)
PF I (Sensitivity)	5 (2)	5 (3)
PF L (Vigilance)	6 (3)	7 (2)
PF M (Abstractedness)	5 (2)	6 (2)
PF N (Privateness)	6 (3)	6 (1)
PF O (Apprehension)	6 (3)	6 (1) ^a
PF Q1 (Openness to Change)	5 (2)	5 (2) ^a
PF Q2 (Self-Reliance)	6 (3)	6 (2) ^a
PF Q3 (Perfectionism)	6 (2)	5 (3) ^a
PF Q4 (Tension)	5 (2)	6 (3) ^a

Note. ^a = Missing value for one participant.

Overall, it was found that attitudes towards older adults were positive throughout the current sample as indicated by an average KAOP score of 139.71 ($SD = 14.82$), which surpasses the minimum cutoff score of 120 (Doherty et al., 2011). An analysis was conducted to determine if there were any differences in attitudes towards older adults between Caucasian people with different European origins. The results of this analysis indicated that all Caucasian people, regardless of background had positive attitudes towards older adults ($F(4, 48) = 1.047, p > .05$). In the current study, the variables which were found to be the best predictors of attitudes towards older adults were gender and personality factors including warmth, reasoning, openness to change, vigilance, and privateness.

Discussion

The current study aimed to identify personal characteristics which are associated with positive attitudes towards older adults. Characteristics which were examined included ethnicity, age, gender, and the 16 personality factors identified by Cattell.

Ethnicity

Results of the current study indicate that there was no relationship between ethnicity and attitudes towards older adults, rather attitudes were equally positive regardless of ethnicity. These results contradict those found in the study published by Valliant et al. (2018) which found that Indigenous peoples had more positive attitudes towards older adults than those in their Caucasian sample, thus inferring that Indigenous peoples were better suited to work in geriatrics. The study by Valliant et al. (2018) also suggested that the difference in attitudes between these two ethnicities could be attributed to differences in cultural values and norms. The Indigenous sample in the Valliant et al. (2018) study used data that was collected at Indigenous community centers and included participants that lived both on and off reserve suggesting a close affiliation to Indigenous values. Furthermore, in remote communities such as on Indigenous reserves, older people often rely on informal caregivers such as friends, family members, and other people in the community (Skinner, Joseph, Hanlon, Halseth & Ryser, 2016). Therefore, people in these communities spend more time with older adults which has been shown to positively influence their attitudes towards older people (Gellis et al., 2010; Laditka et al., 2004; Rupp et al., 2005; Runkawatt et al., 2013; Usta et al., 2012).

In the current study, the Indigenous sample was recruited within the general community, very few were recruited from the Native Friendship center, and therefore it is impossible to draw any conclusion as to the entire sample's affiliation with the Indigenous community. The

difference in results between the current study and the study conducted by Valliant et al. (2018) may be attributed to the relationship of the sample with the Indigenous community as well as the amount of time they spend with older adults in general. Simply being of a certain ethnicity does not guarantee that a person will follow the customs and adopt the values commonly associated with this ethnicity (Eriksen, 2002). The difference in recruitment of Indigenous peoples (general population vs. Indigenous community centers) may assist in explaining the results found in the current study.

Pace and Grenier (2016) have noted that access to education and resources in Indigenous communities are often limited, thus forcing people out of the reserves and into the general population. Recently research has found that 56% of Indigenous people in Canada live in urban settings, and therefore away from Indigenous reserves (21% live in rural settings off reserves; Fitzmaurice & Shawbonquit, 2016). Though it's been the belief for some time now that this would lead would lead Indigenous people to disconnect from their culture and its values (Pace & Grenier, 2016), recent research suggests this is not the case (Fitzmaurice & Shawbonquit, 2016). Many Indigenous people who move to urban areas continue to take part in Indigenous cultural events, and benefit from Indigenous specific social services. Furthermore, many of the report that Elders play a significant part in their lives (Fitzmaurice & Shawbonquit, 2016). Therefore suggesting that moving away from Indigenous reserves does not necessarily mean that Indigenous people will be disconnecting from their culture and values. Consequently, it is not possible to draw any particular conclusion as to why the current sample did not differ on their attitudes towards older people in comparison to Caucasian participant.

Age

The current study found that there was no association between age and attitudes towards older adults, which is in part supported by the literature (Chasteen et al., 2002; Young-Shin Lee, 2009). Previous studies which support the current results offer no explanation or theory to attempt to explain why this phenomenon is occurring (Chasteen et al., 2002; Young-Shin Lee, 2009). Given the limited demographics that were taken in the current study, there is no known variable which is leading to this particular result. Previous studies which evaluated the association between age and positive attitudes towards older adults often suggest that those who are middle aged and older have better attitudes towards older adults than the younger population (Gellis et al., 2010; Laditka et al., 2004; Rupp et al., 2005; Runkawatt et al., 2013; Usta et al., 2012). Runkawatt et al. (2013) suggests that the difference in attitudes towards older adults between older and younger subjects can be attributed to the amount of time they have spent with the older population. It is believed that middle aged people spend more time with older adults, which provides them with more opportunities to form a realistic opinion about the older population. Conversely, the younger generation are given fewer opportunities to interact with older adults and, therefore, rely on other forms of information (such as the media) in order to form their opinion of these individuals (Runkawatt et al., 2013). It is no surprise that the media negatively portrays older adults (Little 2013; Nelson 2004) and it is believed that these negative portrayals are the reason younger people typically have more negative attitudes of older adults (Runkawatt et al., 2013).

In the study by Runkawatt et al. (2013), which evaluated attitudes of nursing students towards older adults, it was found that overall as age increased so did positive attitudes towards older adults, with one exception. Students who identified as belonging to cultures in which

multigenerational homes are the norm had positive attitudes towards older adults regardless of age. This finding suggests that those students who interacted with older adults on a regular basis formed positive beliefs and positive attitudes towards older adults (Runkawatt et al., 2013). Thus reaffirming the belief that time spent with older adults influences attitudes, and could serve as an influential variable as noted in the current study.

Gender

Gender was the only demographic indicator in the current study which was found to influence attitudes towards older adults. More specifically, females in the current sample were found to have better attitudes towards the older population than males, though the effect size was relatively small (7%), suggesting that the difference in attitudes is not overly large. However, females having better attitudes towards older people is a trend that seems to appear repeatedly in the literature (Allan & Johnson, 2009; Barrett & Rohr, 2008; Mansfield-Green et al., 2015; McConatha et al., 2004; Rupp et al., 2005; Soderhamn, et al., 2001; Usta et al., 2012). It is theorized that this phenomenon may be the result of society assigning the role of caring exclusively to women (Bodner, Bergman & Cohen-Fridel, 2012; Wood, 1994). Though men are beginning to take on more of a caring role, in recent years, women tend to predominantly assume the caretaking role (Lee & Tang, 2015). Given that women typically spend more time caring for older adults, this may be a factor contributing to better attitudes (Bodner et al., 2012; Lee & Tang, 2015; Wood, 1994). In the study conducted by Morrisseau et al. (2017), this trend was not observed, rather it was found that those in her sample had positive attitudes regardless of gender. It was suggested, in that particular study, that the lack of disparity between the genders may be attributed to the Indigenous culture and values bridging the gap between genders and therefore

reducing disparities in their attitudes. The current study, however, recruited Indigenous peoples and did in fact find a significant difference between males and females.

As stated above, the Indigenous sample that was recruited for the current study were for the most part recruited within the general population, which may explain the lack of differences in attitudes towards older adults between males and females. Therefore, the Indigenous sample in the current study may not have practiced cultural values as closely as those in the Morrisseau et al. (2017) study. This may explain the differences in the gender gap between the two studies. Furthermore, when comparing the attitudes of both genders in the current study, all participants, both Caucasian and Indigenous, were pooled together. Considering that there was a significantly higher number of Caucasian participants than there were Indigenous, the one ethnicity may have overshadowed the second, thus leading to the differences between genders.

Personality

The present study found the personality factors warmth, reasoning, vigilance, privateness, and openness to change to be predictive of positive attitudes towards older adults. In past research, it was found that the personality factors of Caucasian participants that correlate with positive attitudes towards older adults include rule-consciousness, warmth, emotional stability, and tension (Mansfield-Green et al., 2015). Alternatively, the personality factors of Indigenous peoples that were correlated with positive attitudes towards the older population included reasoning and rule-consciousness (Morrisseau et al., 2017). Though the personality factors that correlate with positive attitudes differ from one study to the next, there are some similarities. For instance, both the current study and the Mansfield-Green et al. (2015) study identified warmth as a personality factor to significantly predict positive attitudes, indicating that caring, warm hearted individuals have better attitudes towards older adults. Moreover, the present study and

the Morrisseau et al. (2017) study found reasoning to correlate with positive attitudes, suggesting that individuals who tend to think more abstractly have better attitudes towards the target population. Though the similarities between the studies are minor it is important to keep in mind that they were not observing identical populations. The sample compiled by Mansfield-Green et al. (2015) was composed of undergraduate students, the majority of which identified as Caucasian, whereas Morrisseau et al. (2017) recruited Indigenous peoples only. The current study sought to obtain a more representative sample of the Northern Ontario population. All participants were of working age (18 to 50), and there was an array of Indigenous and Caucasian participants.

Results of the current study suggest the following profile for hiring employees in geriatrics as this description is representative of those who are most likely to have positive attitudes towards older adults: warm hearted and caring individuals who are bright and open-minded people. They would also be accepting of others without judgment and be genuine and sincere.

Implications

By evaluation the general population in the current study and adjusting for basic demographic information it allows one to better understand which individuals are best suited to work in geriatrics based a set of ideal personality characteristics. Previous studies sought to investigate personality factors in specific subgroup of the population that correlate with positive attitudes (Mansfield-Green et al., 2015; Morrisseau et al., 2017), making it more difficult to implement this model in employment settings. Now that there is one set of ideal personality factors, regardless of age, gender, or ethnicity, it will be more feasible to recommend applying the information in the hiring process of people in geriatrics. In theory, this should help increase

quality of care for older adults as previous research has found that the attitudes that care providers have towards their patients influences the treatment they provide (Chapman et al., 2013; Wade, 1999). Furthermore, with the information that has been gathered in the current study we can begin to develop specific questions that assess these particular personality factors so that they can be asked in interviews as opposed to having potential employees complete an entire personality questionnaire.

Aside from recommending this model of personality to those in charge of hiring staff in geriatrics, it could also be applied in vocational interest tests to screen for people who are most suited to work with older adults. It is well known that there is a shortage of people to work in geriatrics (Meiboom, de Vries, Hertogh & Scheele, 2015). However if vocational interest tests were to scan for this particular pattern of personality, they could recommend individuals for a career in geriatrics. It is not uncommon for high schools in Canada to utilize various vocational interest tests when helping students decide on a career (Ministry of Education, 2006). If it were suggested to more students to pursue a career in geriatrics it may help to fill the labor gaps.

Limitations

The most significant limitation of the current study was sample size. First, the sample was not diverse enough to analyse level of education as there were limited subjects who had pursued more than a bachelor's degree within the Caucasian sample and few Indigenous participants who pursued more than a high school diploma. Because of the lack of variation in the level of education of the participants we were unable to take this variable into account when analyzing attitudes towards older adults. A study conducted by Thorson et al. (1974) found that level of education significantly predicted attitudes towards older adults. Though the study by Thorson et al. is the only one of its kind, it would follow that with increased education, attitudes

towards the target population would become more positive as prejudice in general has been found to reduce with education (Hagendoorn & Nekuee, 2018). Clearly, level of education may be a factor which significantly influences positive attitudes towards older adults and, therefore, merits evaluation.

Second, because of the difficulties recruiting Indigenous people, we were unable to acquire a large enough Indigenous sample to analyze personality traits that correlate with positive attitudes towards older adults within the Caucasian and Indigenous samples separately. Though the overall research question was addressed, it was the researchers' hope to compare the current results with those of previous studies that looked at personality traits of Indigenous and Caucasian samples separately. The difference in the number of Indigenous and Caucasian participants in the current study also bring into question the representation of Indigenous peoples in the results. All participants were pooled into one group when analyzing differences between genders, age groups and when looking at personality traits. It is possible that the Indigenous subgroup was overshadowed, and thus underrepresented in the results.

Another limitation of the current sample is the face validity of the measure used to assess attitudes towards older adults. The KAOP is a self-report measure that makes no attempt at concealing its intentions. The questions are straightforward and obviously assessing attitudes towards older people. It is very possible that social desirability played a role in participants' responses. Social desirability bias is a limitation that many researchers encounter when using self-report measurements, even more so when the measures have strong face validity such as the KAOP (Paulhus, 2002). Ideally, by ensuring the participants that their results will remain anonymous and that their name will not be associated with their questionnaire, participants would respond truthfully. Unfortunately social desirability can sometimes override the assurance

of anonymity (Paulhus, 2002). It is therefore difficult to insist that all responses on the KAOP are true.

Finally, though this research is relevant in ensuring that those who care for our older adults have positive attitudes towards them, it fails to take their perspective into account. When determining what is best of someone, or for a group of people, it is always good to take their thoughts on the matter into consideration. Though this research has identified various characteristics that are associated with positive attitudes towards older adults and therefore good perspective care takers, older adults also have insight into what characteristics they believe a good care giver would have. This research was aimed at finding people who have little to no prejudice towards older adults, who respect them and would therefore be best suited to work with them. For that reason it would be counterintuitive to suggest that we know what is best for older adults without first consulting them.

Future Research

Future examination of attitudes towards older adults should consider using implicit measures of attitudes as opposed to explicit ones such as the KAOP. This would significantly reduce the chances of social desirability influencing the scores and would thus provide a more reliable score. On self-report measures that are as explicit as the KAOP it is easy to respond in a socially desirable way, some might even do it unconsciously as they are unaware of their bias towards a particular populations such as older adults (Paulhus, 2002). In the future, an implicit measure of attitudes could be used to determine the validity of the results found in the current study and could be used in future research on the topic. For instance, the Implicit Association Test (IAT) on aging has been found to be a particularly reliable measure (Lin, Bryant & Boldero, 2011). In a study by Lin et al. (2011) it was found that when comparing participants' scores on

the IAT to those on the Fraboni Scale of Ageism (FSA), a self-report measure similar to the KAOP, that the IAT scores were significantly lower, suggesting that when attitudes are measured implicitly they are found to be lower than when measured explicitly and are believed to be more representative of the participants' true attitudes towards the target population (Lin et al., 2011).

Furthermore, implicit tests such as the IAT can be completed online. Future research should ensure that the three part questionnaire (demographics, measure of attitudes towards older adults, and the personality test) can be completed online in an attempt to increase recruitment. The fact that the questionnaire is very lengthy may have attributed to the high attrition rate. If participants were able to complete the questionnaire online it would allow them to take breaks as desired and would facilitate recruitment as the researcher would not have to meet with every participant individually. By utilizing an online questionnaire it may make recruiting people with more diverse educational backgrounds more feasible. The current study was unable to assess the interaction between level of education and attitudes towards older adults as due to difficulties with recruitment. Having an online questionnaire would make recruiting these specific subgroups more feasible as the participants would not have to meet with the researcher, rather a link or another portal could be sent to them via email allowing them to access and fill out the questionnaire. As studies such as these are typically conducted at a university, future research could also look into acquiring ethics to reach out to alumni with various backgrounds (ranging from undergraduate to doctoral) through e-mail in order to collect data for these specific samples. By e-mailing perspective participants we are not waiting for them to contact us, rather we could contact them, which would also help to increase recruitment. On the other hand, future studies which plan on recruiting Indigenous people, should consider applying Indigenous research methodologies in order to help increase recruitment of this particular population.

Indigenous research methodologies involve working closely with Elders and others in the Indigenous community to develop research methods that are respectful and in the best interest of the community. Using this method would foster a sense of trust, and allow for relationships to be developed between the researchers and those in the Indigenous community, and would therefore help to increase participation (Wilson, 2008).

Finally, it has been suggested that a variable which may lead to positive attitudes towards older adults is time spent with them (Runkawatt et al., 2013; Usta et al., 2012; Young-Shin Lee, 2009). Future research should include questions aimed at assessing the amount of time and quality of time spent with older adults into the demographics questionnaire in order to assess if there is an interaction between this variable and positive attitudes towards older adults. As Runkawatt et al. (2013) suggests that time spent with older adults is the variable which mediates the relationship between age and attitudes. Furthermore, time spent with older adults may prove to be the variable influencing the relationship between gender and attitudes towards older people as well as ethnicity and said attitudes, which has been alluded to in the current discussion (see Appendix E). If attitudes are found to be positively influenced by time spent with older adults the implications would be immense, such that we could begin to positively influence attitudes towards older adults by including them more into society. By doing so, people would be given more opportunities to spend time with older adults, *ergo*, forming positive perceptions of older adults as well as the personality traits associated with said attitudes.

Conclusion

The current study was unique in that it evaluated people in the general population to determine what characteristics lead to more positive attitudes towards older adults. Characteristics that were evaluated include gender, age, ethnicity, and personality. Overall, it

was found that gender and personality were the only factors in the current sample that significantly predict positive attitudes towards older adults. More specifically, it was found that females, and those high in personality factors warmth, reasoning, and openness to change, and low in personality factors vigilance and privateness, exhibited more positive attitudes towards the target population. It was reasoned that females have more positive attitudes as they are more likely to take on caring roles than men, likely leading to more caring and compassionate views towards older adults.

The lack of differences in attitudes towards older adults between Caucasian and Indigenous people may be attributed to the lack of which the current Indigenous sample relates to their cultural values and norms or the amount of time they've spent with older adults. Though previous research has found a difference between Caucasian and Indigenous samples on their attitudes towards older people, these individuals had strong affiliations to the Indigenous culture, which may be the variable leading to the significant difference between the two ethnicities. Moreover, though age was not found to be a significant predictor of positive attitudes towards older adults, many previous studies found that it is a significant predictor. It was theorized that the mediating variable leading to this difference is time spent and quality of time spent with older adults and, therefore, it is not necessarily the age of the participants that is leading to the positive attitudes rather it is the amount of time spent with them which typically increases with age. Therefore, there may be an extraneous variable, such as time spent with older adults that was not taken into account in the current study which may help to explain the insignificant difference between younger and older participants.

These results have implications in the hiring of people in geriatrics and possibly identifying students early on in the education process to help lead them towards a career in

geriatrics in order to meet more of the demand. However, additional research is needed to verify these results, such as research using implicit measures in order to get more accurate rating of attitudes towards older adults.

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Appendix A

**APPROVAL FOR CONDUCTING RESEARCH INVOLVING HUMAN SUBJECTS**

Research Ethics Board – Laurentian University

This letter confirms that the research project identified below has successfully passed the ethics review by the Laurentian University Research Ethics Board (REB). Your ethics approval date, other milestone dates, and any special conditions for your project are indicated below.

TYPE OF APPROVAL / New / Modifications to project X / Time extension	
Name of Principal Investigator and school/department	Amber Sinclair; Paul Valliant, Supervisor, Psychology
Title of Project	Personality and attitudes towards older adults: A Comparison of Indigenous and British/European Descendants in Northern Ontario
REB file number	6009760
Date of original approval of project	November 24, 2017
Date of approval of project modifications or extension (if applicable)	February 8, 2018
Final/Interim report due on: (You may request an extension)	November 24, 2018
Conditions placed on project	

During the course of your research, no deviations from, or changes to, the protocol, recruitment or consent forms may be initiated without prior written approval from the REB. If you wish to modify your research project, please refer to the Research Ethics website to complete the appropriate REB form.

All projects must submit a report to REB at least once per year. If involvement with human participants continues for longer than one year (e.g. you have not completed the objectives of the study and have not yet terminated contact with the participants, except for feedback of final results to participants), you must request an extension using the appropriate LU REB form. In all cases, please ensure that your research complies with Tri-Council Policy Statement (TCPS). Also please quote your REB file number on all future correspondence with the REB office.

Congratulations and best wishes in conducting your research.

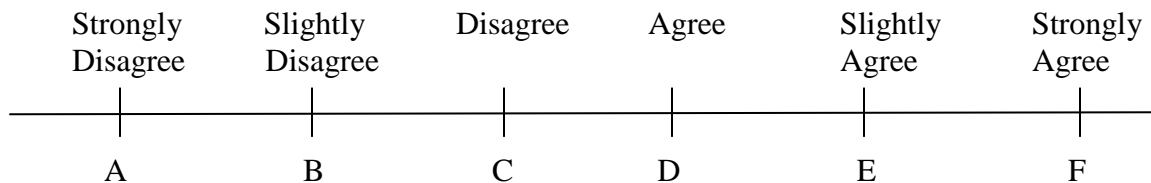
Susan Boyko, PhD, Vice Chair, *Laurentian University Research Ethics Board*

Appendix B

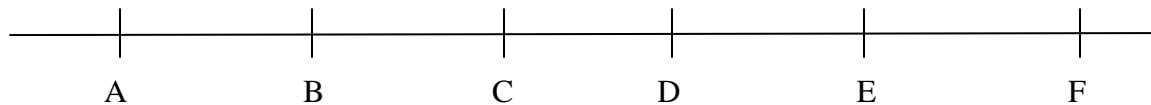
KOGAN'S ATTITUDES TOWARDS OLD PEOPLE SCALE

Directions: Circle the LETTER on the scale following each statement, according to the following key, that is closest to your opinion of old people.

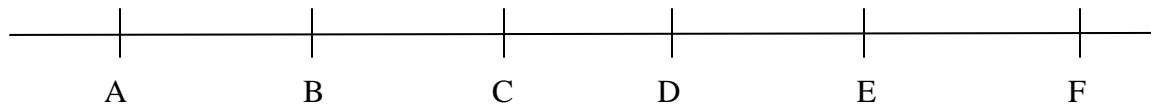
Key:



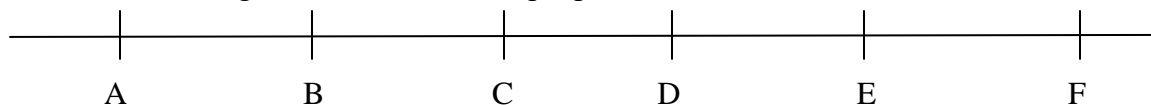
1. It would probably be better if most old people lived in residential units with people their own age.



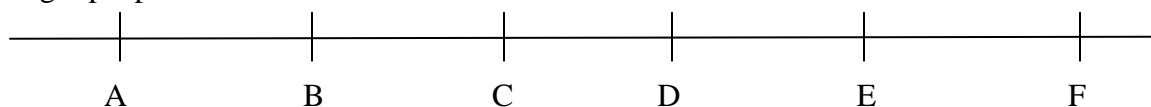
2. It would probably be better if most people lived in residential units with younger people



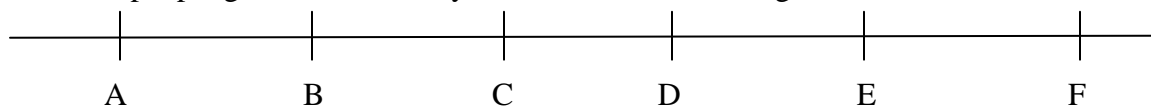
3. There is something different about most people; it's hard to find out what makes them tick.



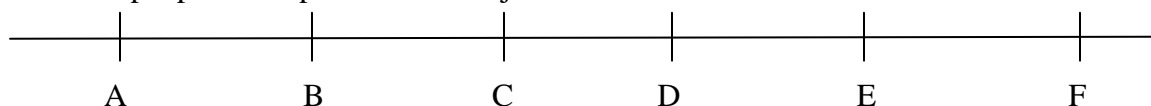
4. Most old people are really no different from anybody else; they're as easy to understand as younger people.



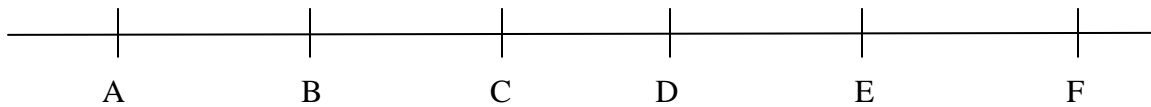
5. Most old people get set in their ways and are unable to change.



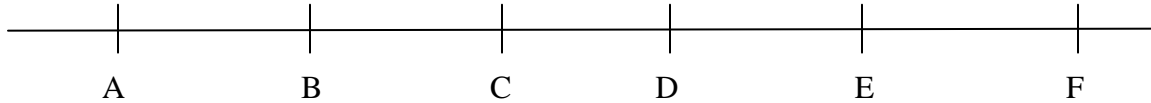
6. Most old people are capable of new adjustments when the situation demands it.



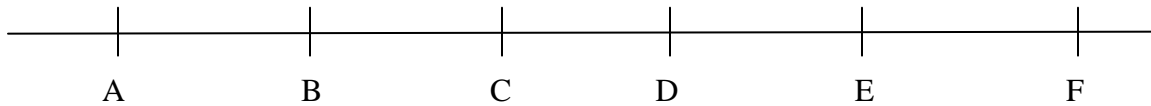
7. Most old people would prefer to quit work as soon as pensions or their children can support them.



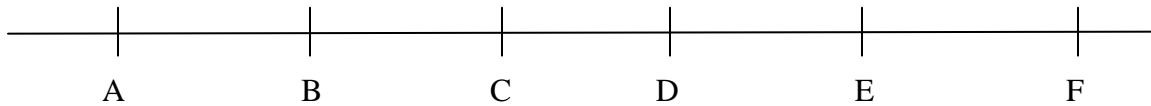
8. Most old people would prefer to continue working just as long as they possible can rather than be dependent on anybody else



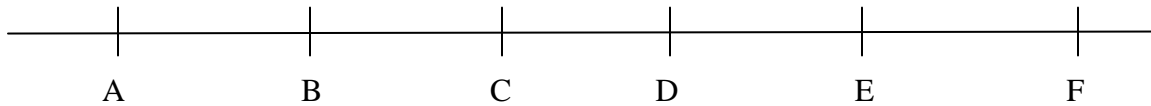
9. Most old people tend to let their homes become shabby and unattractive.



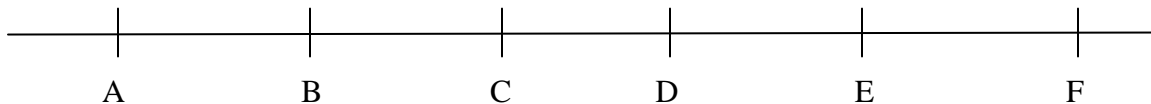
10. Most old people can generally be counted on to maintain a clean, attractive home.



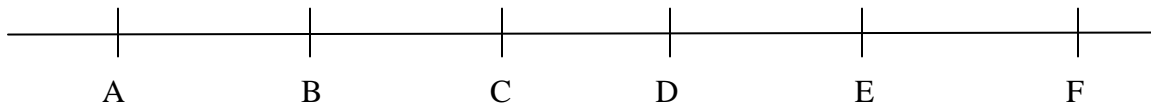
11. It is foolish to claim that wisdom comes with age.



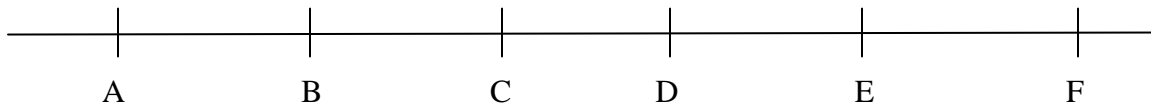
12. People grow wiser with the coming of old age.



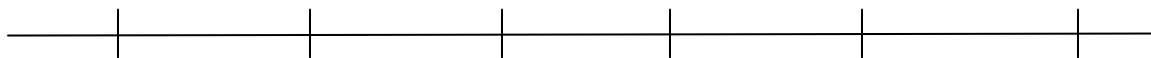
13. Old people have too much power in business and politics



14. Old people should have power in business and politics

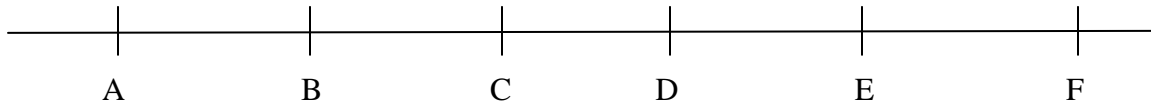


15. Most old people make one feel ill at ease.

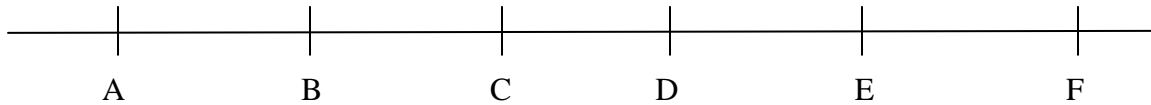


A B C D E F

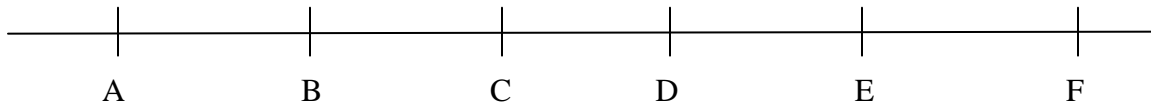
16. Most old people are very relaxing to be with.



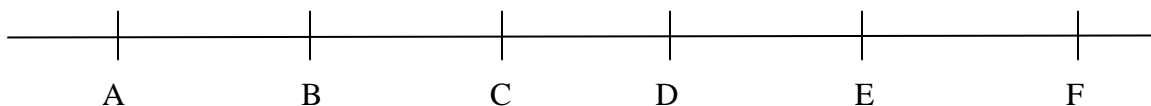
17. Most old people bore others by their insistence on talking “about the good old days”.



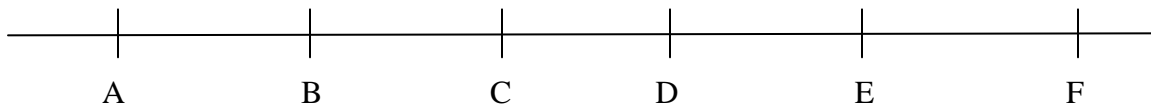
18. One of the most interesting and entertaining qualities of most old people is their accounts of their past experiences.



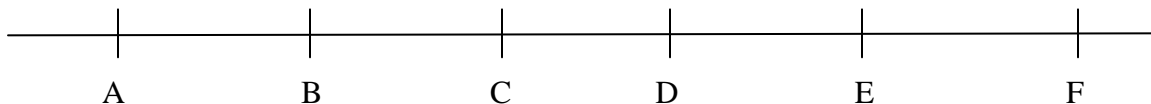
19. Most old people spend too much time prying into the affairs of others and giving unsought advice.



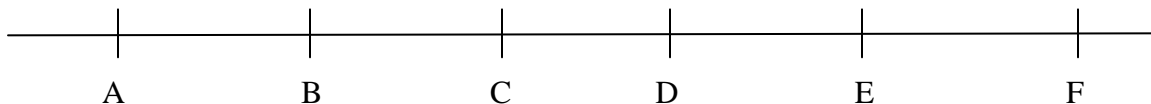
20. Most old people tend to keep to themselves and give advice only when asked.



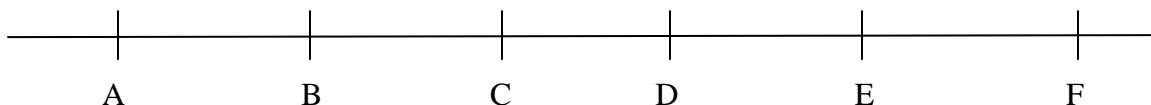
21. If old people expect to be liked, their first step is to try and get rid of their irritating faults.



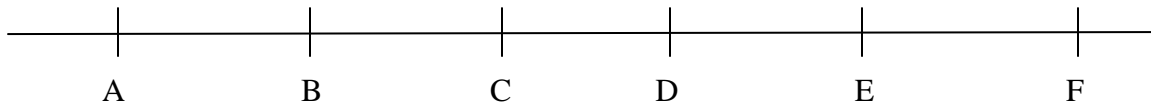
22. When you think about it, old people have the same faults as anybody else.



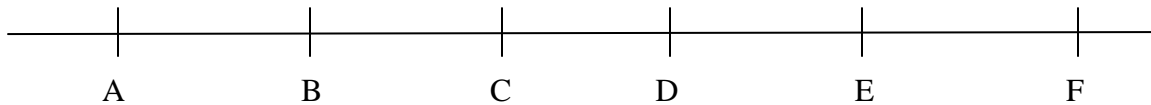
23. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.



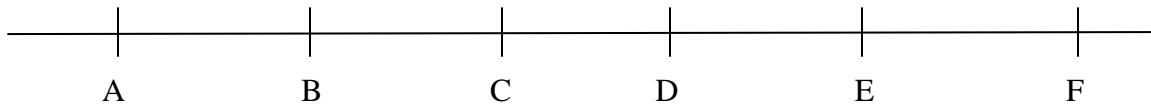
24. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.



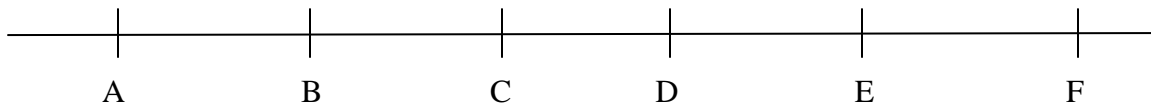
25. There are a few exceptions, but in general most old people are pretty much alike.



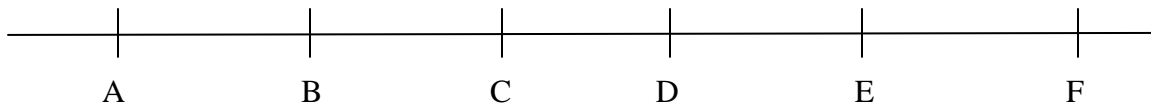
26. It is evident that most old people are very different from one another.



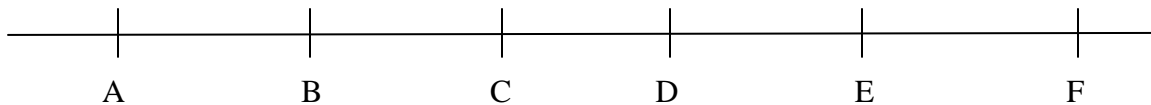
27. Most old people should be more concerned with personal appearance; they're too untidy.



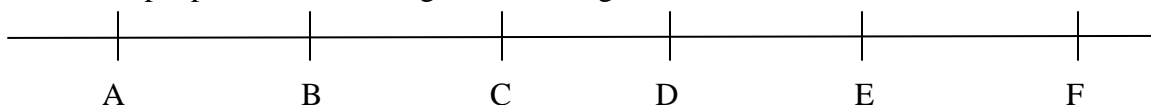
28. Most old people seem quite clean and neat in their personal appearance.



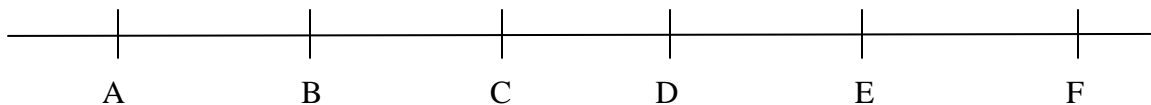
29. Most old people are irritable, grouchy, and unpleasant.



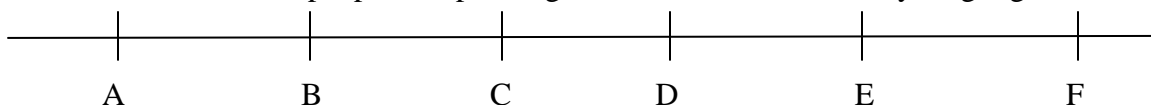
30. Most old people are cheerful, agreeable, and good humored.



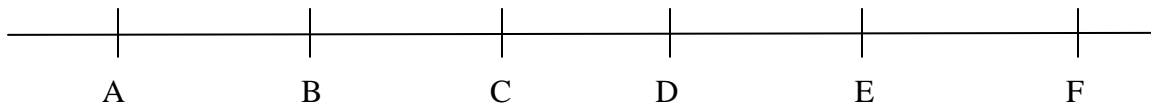
31. Most old people are constantly complaining about the behavior of the younger generation.



32. One seldom hears old people complaining about the behavior of the younger generation.

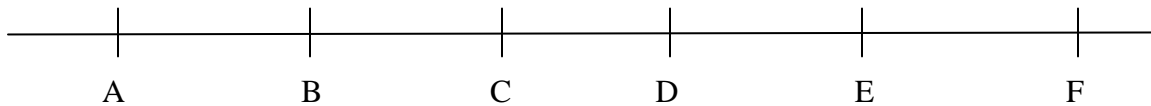


33. Most old people make excessive demands for love and assurance than anyone else.



A horizontal line with six vertical tick marks. Below each tick mark is a letter: A, B, C, D, E, and F, from left to right.

34. Most old people need no more love and assurance than anyone else.

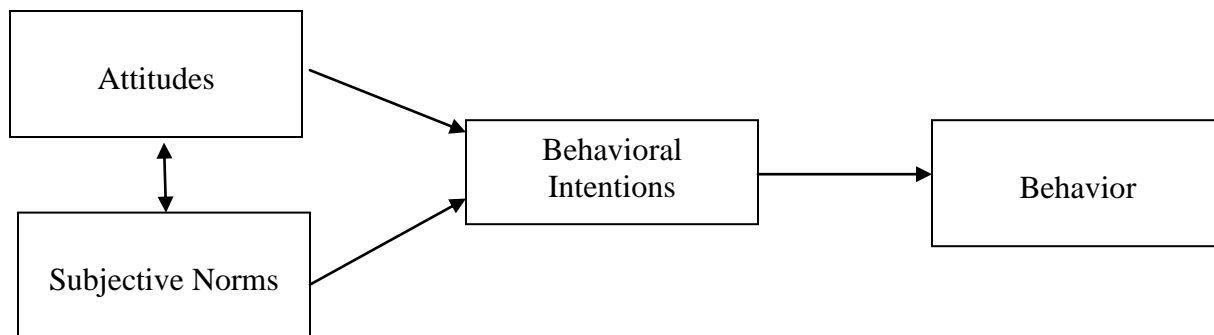


A horizontal line with six vertical tick marks. Below each tick mark is a letter: A, B, C, D, E, and F, from left to right.

Thank you for participating in this questionnaire.

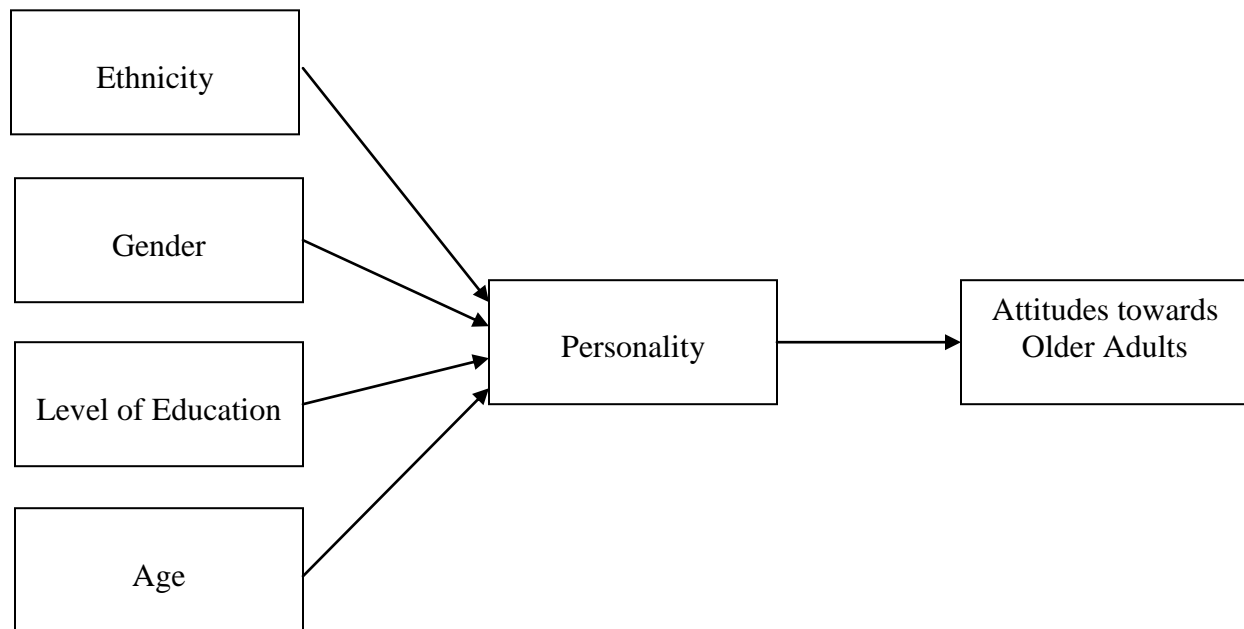
Appendix C

Ajzen and Fishbein's Model of Behavior (1977)



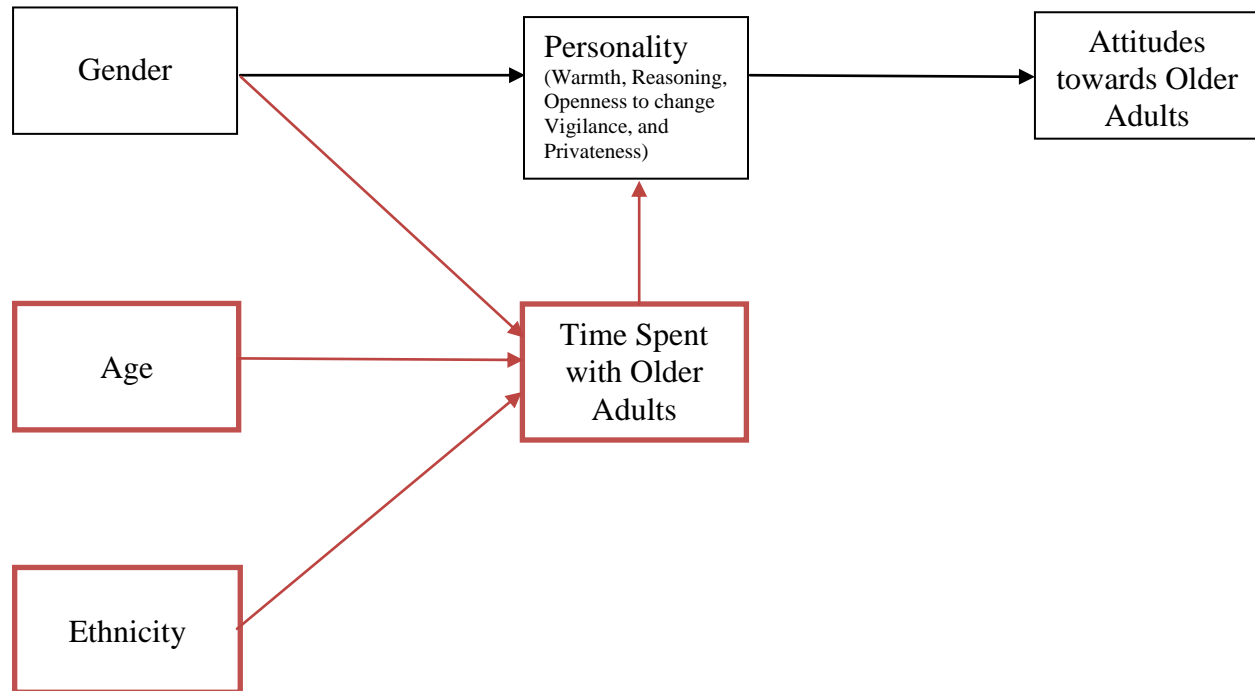
Appendix D

The current study's hypothesized model of attitudes towards older adults.



Appendix E

Proposed model of attitudes towards older adults.



** Variable and associations in black indicate the model suggested by the results of the current study, whereas the variables and associations in red represent the remainder of the proposed model.*

Appendix F

Demographics Questionnaire

General Information: This section asks you some general questions about you. However, the information provided cannot be used to identify you.

1. Please indicate your ethnicity (choose one that you most identify with):

☐ Indigenous

☐ First Nations

☐ Ojibwe

☐ Cree

☐ Odawa

☐ Iroquois

☐ Metis

☐ Algonquin

☐ Inuit

☐ Huron

☐ Other: _____

Specify if you grew up and/ or currently live:

☐ On the reserve

☐ Off the reserve

☐ European Descent/Caucasian (choose one that you most identify with):

☐ French (Acadian, French)

☐ English/ British Isles (Cornish, English, Irish, Manx, Scottish, Welsh)

☐ Northern European (Finish, Danish, Icelandic, Norwegian, Swedish, Scandinavian)

☐ Southern European (Albanian, Bosnian, Bulgarian, Croatian, Cypriot, Greek, Italian, Kosovo, Maltese, Portugal, Serbian, Sicilian, Slovenian, Spanish, Yugoslav)

☐ Western European (Austria, Belgian, Dutch, Flemish, Frisian, German, Luxembourger, Swiss)

☐ Eastern European (Estonia, Latvian, Lithuanian, Byelorussian, Czech & Slovak Origins, Hungarian, Polish, Romanian, Russian, Ukranian)

☐ African Canadian

☐ Asian

☐ East Indian

☐ Other (please specify): _____

2. Gender: F M

3. Please indicate your age: _____ years

4. Highest level of Education/grade completed?

5. What is your current type of employment?

- ☐ Administrator
- ☐ Managerial
- ☐ Trade worker
- ☐ Service worker
- ☐ Educator
- ☐ Clinician (Medical, Psychological, Chiropractor)
- ☐ Other: _____

6. What is your current annual Salary?

- ☐ 0 - \$40,000
- ☐ \$41,000 - \$89,000
- ☐ \$90,000 - \$149,000
- ☐ \$150,000 - \$200,000
- ☐ \$201,000 - \$300,000
- ☐ \$300,000 +

7. Did you/do you have frequent contact with the elderly/your grandparents during your upbringing?

- ☐ Yes
- ☐ No

8. How often do you see your grandparents or have contact with elderly people during the year?

9. Does your family have frequent family gatherings with grandparents?

- ☐ Yes
- ☐ No

10. Do you feel your grandparents/ seniors should be more involved with their families?

- ☐ Yes
- ☐ No

11. Why do you feel that seniors/elderly are not included in family events?

- ☐ Distance
- ☐ Stigma
- ☐ Illness
- ☐ Family conflict
- ☐ Elderly choose not to be involved

☐ Other: _____

12. Do you feel older people are isolated because they do not have ongoing contact with their family members?

☐ Yes

☐ No

13. What best describes the social roles of elderly individuals?

☐ Grandparent

☐ Retired

☐ Burden to society

☐ Friend

☐ Involved citizen

☐ Disabled

☐ Healthy

☐ Advisor

14. Thinking back to your earlier years, how would you describe your general Attitude towards the elderly?

☐ Positive

☐ Negative

☐ Neutral

15. Would you say that the way you feel about the elderly has changed as you age?

☐ Yes

☐ No

If yes, in what way?

☐ More positive

☐ More negative

Thank you for completing this questionnaire!